

Appl. No. 10/633,742
Docket No. 9045M
Amdt. dated 31 October 2006
Reply to Office Action mailed on 1 May 2006
Customer No. 27752

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for identifying an agent useful for treating an angiogenesis mediated disorder, comprising:
 - a) exposing an agent to Human Protein Tyrosine Phosphatase - beta (HPTPbeta) and Vascular Endothelial Growth Factor Receptor - Type 2 (VEGFR2);
 - b) determining whether the agent modulates HPTPbeta activity and VEGFR2 activity, and
 - c) identifying those agents that modulate HPTPbeta activity and VEGFR2 activity as useful for treating an angiogenesis mediated disorder;

wherein the angiogenesis mediated disorder is selected from: (a) disorders, diseases, and/or unwanted conditions characterized by unwanted or elevated angiogenesis; or (b) disorders, diseases, and/or unwanted conditions characterized by wanted or reduced angiogenesis;

wherein the amino acid sequence of HPTPbeta is at least about 95% homologous to the amino acid sequence of SEQ ID NO: 2, 9, 15, or 16; and

wherein the amino acid sequence of VEGFR2 is at least about 95% homologous to the amino acid sequence of SEQ ID NO: 6 or 11.

2. (Original) The method of claim 1 wherein HPTPbeta and VEGFR2 are expressed in a cell.

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3. (Currently Amended) The method of Claim 1, wherein the amino acid sequence of HPTPbeta is ~~greater than 80%~~ at least about 97% homologous to the amino acid sequence of SEQ ID NO: 2, 9, 15, or 16; and the amino acid sequence of VEGFR2 is ~~greater than 80%~~ at least about 97% homologous to the amino acid sequence of SEQ ID NO: 6, or 11.
4. (Cancelled)
5. (Currently Amended) The method of Claim ~~1~~ 3, wherein the amino acid sequence of HPTPbeta has the amino acid sequence corresponding to the amino acid sequence of SEQ ID NO: 2, 9, 15, or 16; and the amino acid sequence of VEGFR2 has the amino acid sequence corresponding to the amino acid sequence of SEQ ID NO: 6, or 11.
6. (Cancelled)
7. (Original) The method of Claim 1, wherein measuring activity of VEGFR2 comprises measuring changes in free intracellular $[Ca^{2+}]$ in response to a VEGFR2 ligand.
8. (Currently Amended) A method for identifying an agent useful for treating an angiogenesis mediated disorder, comprising:
 - a) exposing an agent to Human Protein Tyrosine Phosphatase - beta (HPTPbeta), Vascular Endothelial Growth Factor Receptor - Type 2 (VEGFR2), and Receptor Tyrosine Kinase Tie -2 (Tie-2);
 - b) determining whether the agent modulates HPTPbeta activity, VEGFR2 activity and Tie-2 activity, and
 - c) identifying those agents that modulate HPTPbeta activity, VEGFR2 activity, and Tie-2 activity as useful for treating an angiogenesis mediated disorder;

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wherein the angiogenesis mediated disorder is selected from: (a) disorders, diseases, and/or unwanted conditions characterized by unwanted or elevated angiogenesis; or (b) disorders, diseases, and/or unwanted conditions characterized by wanted or reduced angiogenesis;

wherein the amino acid sequence of HPTPbeta is at least about 95% homologous to the amino acid sequence of SEQ ID NO: 2, 9, 15, or 16;

wherein the amino acid sequence of VEGFR2 is at least about 95% homologous to the amino acid sequence of SEQ ID NO: 6 or 11; and

wherein the amino acid sequence of Tie-2 is at least about 95% homologous to the amino acid sequence of SEQ ID NO: 8 or 13.

9. (Original) The method of claim 8 wherein HPTPbeta, VEGFR2, and Tie-2 are expressed in a cell.
10. (Currently Amended) The method of Claim 8, wherein the amino acid sequence of HPTPbeta is ~~greater than 80%~~ at least about 97% homologous to the amino acid sequence of SEQ ID NO: 2, 9, 15, or 16; the amino acid sequence of VEGFR2 is ~~greater than 80%~~ at least about 97% homologous to the amino acid sequence of SEQ ID NO: 6, or 11; and the amino acid sequence of Tie-2 is ~~greater than 80%~~ at least about 97% homologous to the amino acid sequence of SEQ ID NO: 8, or 13.
11. (Cancelled)

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12. (Currently Amended) The method of Claim 8 10, wherein the amino acid sequence of HPTPbeta has the amino acid sequence corresponding to the amino acid sequence of SEQ ID NO: 2, 9, 15, or 16; the amino acid sequence of VEGFR2 has the amino acid sequence corresponding to the amino acid sequence of SEQ ID NO: 6, or 11; and the amino acid sequence of Tie-2 has the amino acid sequence corresponding to the amino acid sequence of SEQ ID NO: 8, or 13.
13. (Cancelled)
14. (Original) The method of Claim 8, wherein measuring activity of VEGFR2 comprises measuring changes in free intracellular $[Ca^{2+}]$ in response to a VEGFR2 ligand.
15. (Cancelled)
16. (Cancelled)
17. (Cancelled)